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VOL. XIV

JANUARY, 1908

U. S. Department of Agriculture No. 4

The Agricultural Student

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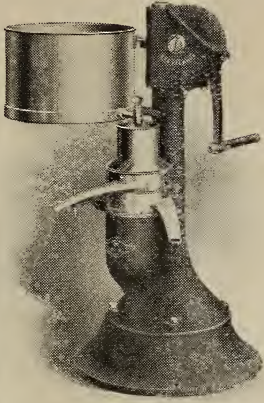


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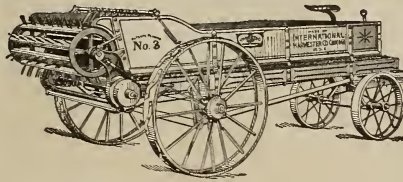
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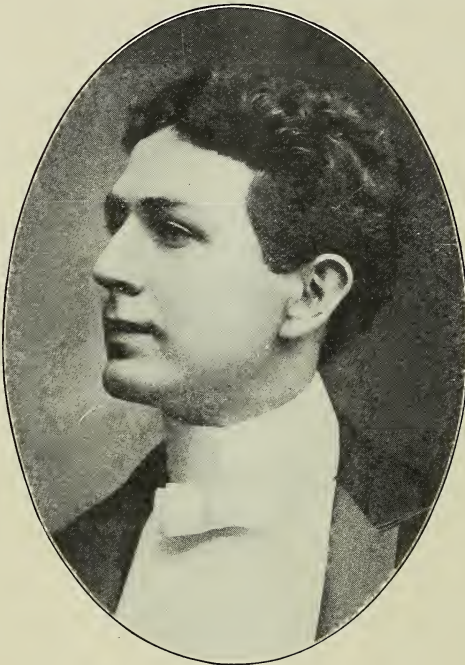
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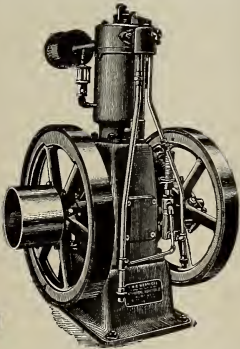
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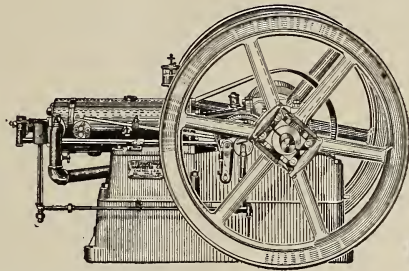
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Ohio Red Quality—1st Prize 2 Year Old Red Polled Steers in Class and Breed Champions
Owned by O. S. U.



Pride of Columbus—Pure Bred Galloway Spayed Heifer in 2 Year Old Class at International
Owned by O. S. U.

THE AGRICULTURAL STUDENT.

VOL. XIV.

OHIO STATE UNIVERSITY, COLUMBUS, JANUARY, 1908

No. 4

IMPRESSIONS OF THE INTERNATIONAL.

James L. Edmonds, '08

They say that the days of great world's fairs are over, that people are tired of the sameness of the displays and won't go any more in sufficient numbers to make them pay. Just the opposite with the International, it is filling the bill and assuming each year more and more of world-wide proportions. It requires no government subsidy to keep afloat either. People are beginning to realize the educational value of such an exhibition. Not only farmers and stock breeders, but broad minded, nature loving city folks as well. To one intensely interested in the breeding of live stock, the International is a vast magnificently equipped laboratory where he may see the living results of different methods and of various lines of breeding as practised by the various artists in this scientific business of improving pure bred stock. Then again it is the place to correct mistakes and errors of viewpoint which are bound to creep in. This is a thing hard to do in books, for there one is prone to read what he likes or heartily agrees with. You are bound to learn a few things by rubbing elbows with those who are "in the know."

The size of the building is a good criterion of the magnitude of the show. Think of the big brick and iron structure seating 10,000 people. The big arena furnishing 250x100 feet of the best of tanbark footing and better still the ring

full to overflowing with the pick of the whole land. Perhaps figures are needless. There were shown 1263 cattle, 665 horses, 375 hogs, 1146 sheep, making a total of 3449 animals. The United States, Canada, England and Scotland were all represented.

The evening shows, while perhaps not so educational as some of the other features, furnished good, clean, exciting sport. The horse show was of high quality, there must be some of the right sort in and about Chicago. Great rings full of cattle were paraded each evening. The interest in the packers' turnouts seems to be of undying interest. Wonder if the crowd at the auto show, in the Coliseum, cheered as much as they did when their favorite packer's six entered the ring? Wasn't at the auto show, but I doubt it. Everyone knows of Armour's famous six of grays which toured Great Britain last summer. In the Nelson Morris six we have some of Scotland's best over here. The evening show wound up with some high jumping and movements by a company of cavalry from Ft. Sheridan.

The show of Shorthorns was the best yet. Somehow, take it up one side and down the other, you can't get away from the Shorthorn, and when you consider their adaptable utility and beauty, their mossy coats of hair, their quality of skin and even deep wealth of fleshings, you

don't want to. You don't wonder when you saw them that it took the judges, at times, nearly two and a half hours to pick out the prizes winners. The champion steer was a high grade Shorthorn yearling. He was fed on oats, peas, roots and hay. Wonder if that had anything to do with his getting so high up? Would corn have helped any?

To one who has not seen many Clydes, as would be natural to a native of the Buckeye state, this was a feature not to be lightly passed. In the States we haven't got to the point where we breed so many of the prize winning animals as we do with Shorthorn cattle. You learned a lot about pasterns, quality of bone and action if you watched the judging here very long. Somehow or other the Hackney must be coming to its own in the west. Fred. Pabst alone contributed a show. Some may endeavor to dispute the title of the big Hackney, but of the Hackney pony never, no use, it can't be done.

Possibly to the agricultural student none of the lessons were more valuable than that of watching the expert judges at work. To see their accurate and for the most part very rapid work furnished the student with much thought as to the how of getting there. The boys would refer to James Durno, the Scottish judge, as a "shark," others, no doubt, would say a "master hand," or something of the sort.

One is rather inclined to believe that the agricultural college is becoming a fixed factor in the big show. There seems to be a growing spirit of commendation of their work and less criticism than in some former years. The Breeders' Gazette aptly refers to the International as being made an elective

course of the agricultural college.

Sort of proud of Ohio, aren't you, or if you were, more so than ever? Not only of her breeders and importers, but of the College exhibit as well. It surely surpassed any exhibit previously sent up. Ohio State must be breeding the right kind of Berkshires. Doesn't that word breeding sound especially good here? No one will forget the picture of Uncle Davy Fyffe and the Shorthorn calf. They are a great pair and we all think lots of them.

Think of the above reminds one that it is only a few years back since there was "not much doing" in the Animal Husbandry line at O. S. U. Before Prof. Plumb's time we don't remember of hearing of a separate department and about all the live stock to shout about was a herd of grade dairy cows and a few very common work horses. But a change was not long coming. If you don't believe it, take a good square look at the new barns and then a peep into the old ones and see what there is to fill them with when they are ready for occupancy. Not long since we didn't have Prof. Marshall, with his quick practical way of getting there. The Texas lads at Chicago were sorry he wasn't still there. We're not. Or Mr. Williams, who is always ready help one straighten out his difficulties. Uncle Davy in his genial jolly way has done wonders at his end and made hosts of friends besides.

Well, you may ask what more remains to be done. The rest is "up to" the students. It surely behooves us to be "up and coming" and at least show partial appreciation of the hard work that is being done by Prof. Plumb and his colleagues.



Ohio Princess—Fourth Prize on Yearling Clydesdale Filly Class at the International.
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BENEFITS OF A TRIP TO THE INTERNATIONAL

George E. Simmons, '08.

To the lovers of art, long journeys across land and sea are considered irksome when compared to the enjoyment and benefit to be derived by standing before a masterpiece, studying and analyzing the picture, noting an effect from one viewpoint and then from another, letting the light fall upon the different parts of the picture, and studying it with the setting appropriate to the character depicted by the master hand. The hours of ecstasy and delight will imprint on the mind of the visiting artist a lasting image that will unknowingly be depicted in the productions of his own hand. The delight of seeing these products of a master hand is only excelled by an op-

portunity to see the master himself and have him exhibit the production, point out its characteristic features and speak of them as though they were a part of himself; for, in fact, they are a demonstration of the ideal existing in his own mind.

A trip, such as the one to the International Live Stock Exposition, must be taken to appreciate what it really means. In the first place, it is not at a great distance and the expense may easily be kept under twenty dollars for a four days' stay. In the next place, it is all the name implies. The display is not confined to any one section or country, but is open to the whole world, the ex-

hibits being owned by men of different nationalities. The condition of showing was not, who are you? but, can you show us animals of superior quality? This is demonstrated when it is found that there were more than fifty carload lots of stock that were refused permission to show after they had been examined by the entrance committee, showing that every entry meant a superior animal. The German government was represented by a select number of German coach horses. These represented the choicest animals within reach of a wealthy government. Private enterprise by Americans, both of the United States and Canada, was in evidence every where. And not the least in this enterprise, but away up in the front rank in regard to numbers as well as to quality, was our own Ohio. The display of various classes of stock by the College of Agriculture of our State University was of a very high class, as evidenced by more than one thousand dollars in cash prizes brought home. One Shorthorn calf won the blue ribbon in one exhibit after another, finally winning the purple ribbon as the champion of the breed, and was set aside only after a very careful and painstaking examination by Mr. Durno, of Scotland, a famous judge of cattle, when he selected what afterwards became the grand champion animal of the Exposition.

When it came to individual enterprise, McLaughlin Bros., of Columbus, Ohio, are worthy of great commendation for their display of horses. No expense had been spared. Their display had been augmented by recent importation of Percherons and French Coachers. The Chicago Live Stock World gave the following in headlines: "Percheron Exhibit Considered the Best Ever Made in Any Ring." Dan Black, of Ohio, got "Reserve Champions," with a carload of

Herefords that were surely prime, Todd, of Ohio, carried off the Grand Champion honors on carload lots of sheep. If for no other reason, every Buckeye should go to the International to see Ohio's exhibit. It could not be seen more cheaply. Hogs could consistently be mentioned with credit to our state.

The lover of stock, the student of animal husbandry and the breeder, all can worship the shrine that best suits his fancy and get the inexpressible something called inspiration, to help in the upbuilding of a profession that not only appeals to the aesthetic, but is realized in the substantial support of the world's millions. This is standing before a panoramic picture, as it were, and seeing the various parts that compose the whole.

Now we will turn to the master. Each animal showed the touch of the master hand in its thorough grooming and training. Every hair and fiber must be in its place even if it was needful to comb with a toilet comb many times over. The men really love the animals; and it is no wonder.

The exhibits received round after round of applause from the thousands of spectators seated around the amphitheatre, many of them ladies. Many of the ladies were enthusiastic, not only over the beautiful display, but were keenly alive to the significance of the exhibits, and could talk intelligently on the merits of the different classes of stock.

Some of the exhibitors have been mentioned in a casual way, and it will be useless to mention many. These men showed every courtesy of gentlemen, and to hear them discourse upon the merits of the particular breed in which they were interested was an opportunity coming first handed. To those in the show-ring and to all who visited the great barns provided by the Union

Stockyard Company these men gave valuable information. It is no little part of an education to know men and to know them by their works. How much keener is the interest in an article written by a man one has seen, and also in an article about some noted animal after having seen it. The picture of the writer or of the animal rises vividly in the mind's eye. Who after seeing Whitehall Sultan, can read about that strain of cattle without seeing that wonderfully perfect conformation? Roan King, the Grand Champion, owned by Mr. James Leask, of Ontario, Canada, brings to mind the wide-awake owner holding a roan calf so perfect in outline, breed-type and general conformation, that to see it was but to admire and wonder at the high degree of perfection possible to be reached.

Much interest was manifested in the foundation stock for the establishing of the American draft horse. This was represented by two splendid gray mares, Gray Pearl and Rose of Bromfield, displayed by the Iowa Agricultural College. These are two out of twenty mares kept by the U. S. Government for breeding purposes in order to establish an American draft horse breed. They were shown

in a Clydesdale class, Rose of Bromfield, winning first place.

One could but be impressed by the judges in their work. This is where the practical eye and the skillful touch is in evidence. The student must follow the eye of the judge, note how he gives a touch here, lets his hand glide over a part there, then after placing the contestants in the order of their excellency, steps back and carefully reviews the lot. No haste there; no careless attitude, but all is done with such directness and exacting care that the master mind is shown in such a way that it must be seen and studied to be understood.

Some one might say, We cannot all be expert stock judges or pure blood stock breeders. That may be true, but any thoughtful person can carry home with him from the International Live Stock Exposition conceptions of form and conformation of a correct type which may be borne in mind and profited by when selecting the progenitors of the young stock upon which it will be necessary to depend in keeping the profit and loss account on the proper side of the ledger.

Ohio State University, Columbus, Ohio.



THE LIVE STOCK EXHIBIT OF THE DEPARTMENT

Professor C. S. Plumb.

The University showed in both open and college competition, ten steers, fifteen hogs and five wether lambs. Many prizes were won, including four championships and one grand championship. The total amount of money won was in excess of \$1000. The following statement shows the character of the places won by the University stock:

Shorthorn pure bred steer calf, "Ohio's Crown." First prize in open class in a ring of 26 calves; first prize junior calf; first prize in Clay, Robinson specials in college competition, and champion pure bred Shorthorn steer of the total exhibit of 93 head. The Shorthorn steer championship is one of the most important awards of the International fat cattle competition. This steer, a beautiful white roan, was calved at the University, being sired by Fair Sultan, owned by Mr. J. A. Gerlaugh, and out of Julia Everitt, an imported cow owned by the University and sired by Bapton Ensign. Fair Sultan is a son of the noted Whitehall Sultan.

Red Polled pure bred two-year old steer, "Ohio Red Quality." First prize in class and later declared champion steer of the breed. Also was awarded third place in carcass test, with a live weight of 1632 pounds, a dressed weight of 1087 pounds, or dressing out 67.52 per cent.

Galloway pure bred two-year-old spayed heifer, "Pride of Columbus." Second prize in class.

Galloway pure bred yearling steer, "Bluster." First prize in class.

Galloway pure bred steer calf, "Scotish Lad." Second prize in class. The above mentioned Galloways, as a herd,

won second place in the breed steer herd competition.

Hereford grade two-year old steer, "Ohio Disturber." First prize in Hereford Association specials.

Shorthorn pure bred yearling steer, "Great Columbus." Fourth prize in American Shorthorn Association specials.

Clydesdale pure bred yearling filly, "Ohio Princess." Fourth prize in open class and third prize in class restricted to animals of American breeding.

Berkshire pure bred swine. First in class on single barrow six to twelve months old, and later, breed championship on the same. First in class on pen of three barrows six to twelve months old. This pen was later not only made champion pen of Berkshire barrows, but grand champion pen over all breeds, grades and crosses, the one highest award on pen of three swine given at the International. Third prize on Berkshire barrow under six months. All of the above pigs were bred by the University and sired by the Masterpiece boar, Paymaster 4th, owned by the Ohio State University. The prizes won by these Berkshires are noteworthy as having been won in the severest barrow competition perhaps ever held in America. It is also worth mention, that at the 1905 International, the Ohio State University won the grand championship with a pen of three Berkshire barrows of its own breeding, while at the 1906 show the University won the breed championship with single barrow. This is a really remarkable show ring record.

Hampshire pure bred barrow. Second prize for barrow under six months.

Large Yorkshire pure bred barrow. Second prize on single barrow under

six months, and first prize for pen of three barrows under six months.

Numerous special prizes, such as are offered by breeding associations were won, and also a number of Clay, Robinson & Co. college specials. Mention may be made of second prize for the general exhibit of a college, of five steers, five sheep and five hogs, offered by Clay, Robinson & Co., and a special prize of Swift & Co. of \$50 to the person winning a grand championship on hogs fed in which Swift's tankage formed part of the ration.

The following state colleges exhibited stock at the 1907 International: Ohio State University, Purdue University, Wisconsin, Minnesota, Missouri, Nebraska and Cornell Universities, and the Iowa, Kansas and South Dakota Agricultural Colleges. Of the ten institutions, Ohio was one of the most successful, and was the only one to win a grand championship. As a result of her showing success, two Armour scholarships, worth \$250 each, will be given the University to assist worthy students in the College of Agriculture.

THE STUDENTS' JUDGING CONTEST.

H. W. Vaughan, '08

The students' judging contest at the International is well known in a general way, but the particulars of the contest are very little known except to those who have taken part in it. This is largely due to the fact that the contest is held on the Saturday preceding the week of the exposition, when but very few visitors have arrived for the show.

Eight colleges were represented by teams this year. These were Ohio, Ontario, Texas, Iowa, Missouri, Kansas, South Dakota and Washington. Each team was composed of five men, although it was not necessary that the same five should compose both teams, the privilege of substituting other men for either of the teams, being permitted. Little substituting has been done, but as the extra men this rule allows, makes the contest hard to manage no substituting will hereafter be permitted and the same five men will judge all kinds of stock.

Twelve rings of four animals each are judged. To give some idea of the nature of these rings, this year's list is appended:

HORSES.

1. Percheron stallions.

2. German coach stallions.
3. Championship Shire stallions (all ages).

CATTLE.

1. Aberdeen Angus bulls.
2. Shorthorn heifers.
3. Fat cattle (grade Angus and Gallo-way).

SHEEP.

1. Rambouillet rams.
2. Shropshire ewes.
3. Cotswold ewes.

SWINE.

1. Fat hogs for market (Hampshires).
2. Bacon hogs for market, disregarding weight (Yorkshires).
3. Berkshire barrows, giving due consideration to breed characteristics, but giving market characteristics the preference.

At the beginning of the contest the roll was called and each man given a number. All contestants then took seats in a section of the amphitheater reserved for that purpose, each man taking the seat corresponding to his number. After the superintendent gave a few preliminary remarks, four rings of stock were brought into the arena. Previous to

this all contestants were assigned to one of four sections. Each section was assigned to one of the four rings of stock, eighteen minutes being given for placing each ring, and then the sections proceeded in rotation to the other rings until all four sections had judged the four rings. Written notes were taken and the placing of each ring was handed in on a card provided for that purpose at the end of each period of eighteen minutes. After the first four rings were looked over, the contestants again took their seats and awaited their turn to be called before the judges to give their reasons. In the meantime they were permitted to look over their notes and there was always plenty of time to do this between giving reasons for each placing. Each kind of stock has a jury of three judges. These juries "hold court" in the boxes along the sides of the arena and the contestants

come one at a time and sit before them and explain their placings. Two minutes were allowed each man.

The giving of reasons was not a difficult matter as most of the judges made it as easy as possible for the contestant. No notes were permitted while giving reasons, but a contestant is handed his card with his placing on to consult while he is talking. No questions were asked except by the sheep judges. A man would no sooner start out to explain his placing of a ring of sheep than one of the judges would cut in with some such question as, "Why did you place No. 2 last?" "Did you find any blue spots on the skin of No. 4.?" "Which ewe of the four is the best Shropshire type?" etc., etc. This method helped to break up the monotony of the work and it was especially cheering at times to hear the contestants from other schools who had



Bluster.—1st Prize Yearling Galloway Steer, 1907 International. Owned by O. S. U.

carefully prepared orations on each ring, express their disgust at the methods employed by the sheep jury.

After going through with this system three times the twelve rings were judged and the contest ended. Although it was a rather tiresome day's work, it is an experience well worth all the time and effort needed in preparation and even if it is not always possible to win a trophy, a respectable showing may at least be made and the contestants are bound to profit considerably by the experience.

The results of this year's contest are as follows:

Ranking of colleges in judging of cattle, horses, sheep and swine: Iowa, Ontario, Missouri, Ohio, Kansas, Texas, Washington, South Dakota.

Ranking of colleges in judging horses:

Iowa, Ohio, Missouri, Washington, Texas, South Dakota, Kansas, Ontario.

Rank of college in judging cattle: Iowa, Ontario, Ohio, Kansas, Missouri, Texas, Washington, South Dakota.

Rank of colleges in judging sheep: Ontario, Missouri, Kansas, Iowa, Texas, Ohio, Washington, South Dakota.

Ranking of colleges in judging swine: Missouri, Ontario, Iowa, Kansas, Ohio, Washington, Texas, South Dakota.

Rank of colleges in judging cattle, sheep and swine: Ontario, Iowa, Missouri, Ohio, Kansas, Texas, Washington, South Dakota.

In the ranking of individuals, Turner C. Cochran, of Missouri, was the high man of the entire contest. On horses, W. H. Peters, of Iowa, stood first; and on cattle, sheep and swine, E. N. Wentworth, of Iowa, was high man.

THE HORSE SHOW AT THE 1907 INTERNATIONAL.

Donald R. Acklin, '08

It may be that at previous internationals there have been greater shows as far as numbers are concerned, but surely this year's exposition has far surpassed all other shows in the quality and general excellence of the horses exhibited.

All day long for six days one side of the big tan bark ring was filled with breeding classes, and then in the evening there were classes for harness horses, ponies, saddle horses and the big draft teams. It is a wonderful sight to see the six-in-hands shown, especially the Armour grays, and as you see them dashing around the ring in figure 8's, in small circles, when the leaders are trotting hard, the wheelers walking and the rear of the big yellow stationary, you can not but wonder at the impression this team must have made upon the English at Olympia.

Other features of the night shows

were the processions of the prize winners of the day, the splendid maneuvers of the cavalymen and the exhibition of twelve of the Kaiser's horses. It was evident from these that the German ideal of a coach horse is not the same as ours; all of these animals were big, well made fellows, with a good strong trot, but none of them had the style nor the flashy, brilliant way of going that a coach horse needs in this country, and while they would all make excellent horses for officer's mounts, a pair of them before a mail phaeton could easily be outclassed by some of Frank Mitchell's stuff.

The class for aged Percheron stallions was a strong one and there was a lot of satisfaction among the Ohio delegation, when McLaughlin's Coco carried off the blue ribbon. For three years under four, Mylord pushed Dragon (a brother of

last year's winner, imported by McLaughlin but sold to Blythewood farm) pretty hard for first, but Dragon pulled first and later landed the championship over Coco, reserve.

In the French coach class McLaughlin had everything his way. Their two seal-brown stallions, Decorateur and Extraordinaire, made a very sensational showing, each being at the top of his class, and Decorateur winning the championship.

In the German coachers Crouch & Son filled nearly all of the classes. Old Hannibal topped his class and again won the championship. Surely here is a great show horse, comparable with the French coacher, Perfection, for this makes the sixth or seventh time that he has been made champion at this show,

and his owners claim that he is just as good in the stud as is the show-ring, and he is every inch a show horse. He is an animal of exceptional style and beauty of conformation, and when he moves it is hard to find a better actor. Not only does he go high at both ends, but he carries himself so well and goes at his work in such good grace, moving with almost clock-like regularity.

The show of Clydesdales was great. The classes were all filled with good animals making competition very keen. Graham Bros., of Claremont, Ont., Canada, and Graham, Renfrew Co., Toronto, Canada, carried off all firsts and champions (with Sir Marcus), and for aged mares Iowa Agricultural College

(Continued on Page 18)

A VISIT TO THE CHICAGO PACKING HOUSES.

R. H. Williams,

Assistant in Animal Husbandry, Ohio State University.

To many people who are interested in the live stock business, the local buyer or the show ring is their court of highest appeal. This is safe only in so far as these places reflect the real usefulness of their animals, but the only way to test the real value of any meat animal is to test its ability to retail over the block and suitability at the table. The retail butcher stands directly between the consumer and the large packer, reflecting back to the latter all the likes and dislikes of the consumers. In the past the great packing houses have made an especial effort to gather information respecting the production and consumption of farm animals with the object of harmonizing these with the killing qualities in order to arrive at the very best sorts for farmer, for packer and for the consumer. At present it is generally con-

ceded that the packing houses are the supreme court of highest appeal. Because of the unique position held by the Chicago packing houses, together with their complete establishment, it should be of more than passing interest to make a hurried visit to their plants.

A visit to one of the half-dozen large Chicago packing establishments is no small undertaking, but always within the reach of anybody interested in live stock provided he has some hours and considerable muscular energy at his disposal. Visitors are always welcomed, treated courteously and everything done to make these visits interesting and profitable. A special guide was supplied to conduct the Ohio State students through one of the chief plants, and that body was loud in its applause of the courtesies shown them.

A short walk from the street car line brings us to the packing houses. The one we were in is one of the six large concerns, all of which follow the same general course in manufacturing and are more or less alike.

After a preliminary period of preparation the animals are killed in the most humane and sanitary manner. The carcasses pass along in an endless procession and hardly are out of motion until they reach the refrigeration rooms, called the coolers. Stations are located along this railroad of meat where employes and government inspectors are located, each man doing his special task in grab-like movements as the train passes. The whole process is very interesting and so gradual that you find yourself at the end of the course without seeing especially great changes wrought at any one time.

After the carcasses are dressed they are sent to the coolers to be cooled and are held in storage until required. Our party had a very interesting time in the cooler. A large, heavy man, wearing a long white coat and carrying a knife large enough to cleave Goliath, accosted us by saying, "Are you boys from the college?" We informed him we were from Ohio State and were trying to learn something about the dead side of animal husbandry. This seemed to please the large-hearted, big-handed man, and he proceeded to show us some of the carcasses. "Now there is a steer that lots of people would call pretty good. He is fat and that is a mighty good thing, but fat isn't everything. They must be made right and have the right kind of meat. Now, over here is a mighty good side. Compare it with the steer back there. See how coarse his meat is and how rough and bunched the fat is put on the outside. He has twice too much external fat and not half enough mixed with that red meat. His eye of meat is

also small. Another big fault with him is he hasn't any back and loin; he's all belly, plate and shoulder. This is cheap meat and we get too much of it. Boys, I'll tell you what the butcher wants; he wants those kind of steers that dress out the highest percentage of valuable cuts and yet are smooth and attractive, showing white fat and bright red, fine-grained meat. The fat and lean meat must be well marbled with a whole lot of lean meat. You can't get too much lean meat on the back, loin and ribs if it is well mixed with fat. I guess it isn't every pure bred animal that would make a good carcass for I've seen lots that were just as rough and as coarse as any, although they were fat."

Our jolly butcher friend had just one more word to say as we were leaving: "You college fellows come down here and spend a whole week looking at those cattle and sheep and swine they have up there at the show and hardly look near the packing houses. Why, boys, you are commencing at the wrong end, for they can't pick out the good ones up there that kill well. You fellows should spend more of your time in the stock yards and coolers and then you might learn something about the good ones. Good-bye, boys, come again."

A trip through a large packing house would not be complete without visiting the administration building—the main office. We walked into a room where hundreds of clerks were engaged in the various activities common to offices; dozens were running adding machines, scores operating typewriters, others checking, many dictating letters, office boys and various other accessories were in evidence until one's head was lost in a maze of busy people. Our guide said: "It is here that all the real business is transacted, checked and recorded for our company." Judging by the number and the activity of the office help, it looked

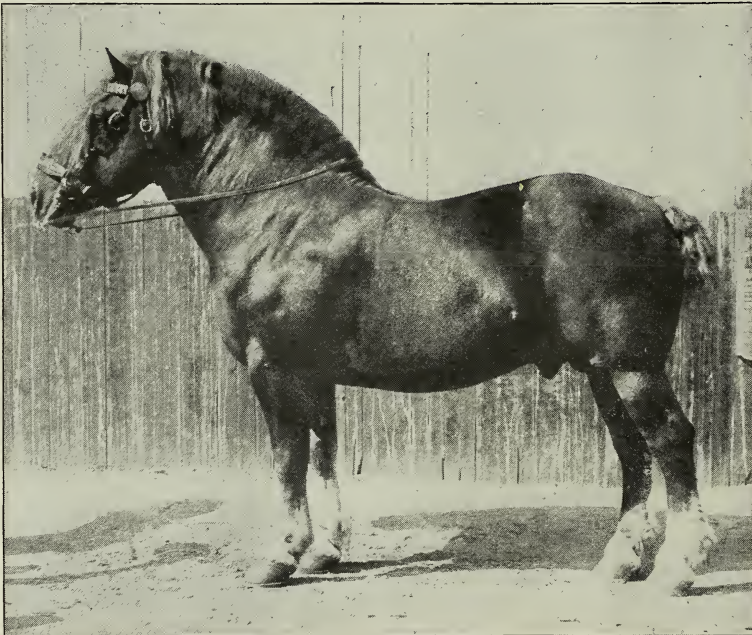
sufficient to be able to do a large volume of business, sure enough.

No attempt will be made to give a full account of what a visitor sees in any of the large packing plants. Suffice it to say, however, that the dressing of the stock, the cooling of the carcasses and the office help are only three of the departments and representing only a small part of any packing establishment. It would be tiresome to give a detailed description of the canning, fertilizer, bone, soap, boxing, shipping and the many other departments. Each of these and many others is a fit subject for a special article alone.

It is impossible to make a visit to a packing house without seeing that perfection and organization permeates all operations there. Clock-work regularity, efficiency, cleanliness, economy of labor and time, with the object of converting the animals into the most satisfactory and profitable products, are prime fac-

tors. One important feature presented everywhere is the fact that the utmost use is made of everything. There is positively no waste products in the Chicago packing business. It is here that these centralized places have an especial advantage over smaller plants such as are found in towns and rural butcheries. What is not suited to the most exacting trade finds its place lower down in the scale until the lowest product is called fertilizer. It is the object of the administration not to make more fertilizer than what is absolutely necessary.

As time passes such thorough and wide awake concerns, which have perfection for their goal, must continue to wield a powerful influence upon the live stock industry. The student of agriculture, the economist, the mechanic, the meat consumer and the practical farmer, whether engaged in pure bred or grade stock raising, will all find much of interest and concern in a visit to any of the large packing houses.



A Prize Winning Belgian.

FROM FOALHOOD TO A HORSE READY FOR SERVICE

By David Tyffe

In promising to write something about how to raise a foal from foalhood up till it is a horse ready for service, I am only going to write of my own experience and observations, and it will be in regard to the draft side that I will write, though for that matter the caring for a draft or light legged foal should be about the same.

The care of the mare before foaling is very essential. She should be worked regularly close up to the day of foaling. She should be fed on oats and bran with plenty of good hay and should have a roomy box stall at least two weeks before her time for foaling is up. I have often heard it said that mares should not be worked before foaling, but my experience is against that, as I have found that mares that have been worked or regularly exercised up to time of foaling, foal easy and have hardy colts. I do not mean that they should be heavily pulled or strained in muddy or soft places. Backing heavy loads is also not good for mares near foaling, but taking for granted that most of the foals in the draft line are raised on the farm, the mares can do regular farm work before foaling and will not be hurt a bit. Most of the mares show little tips of waxy substance on the points of the bits and some commence to let milk run from them a little from twelve to twenty-four hours before foaling, and in some cases forty-eight hours. When any of these indications are seen it is not safe to go very far from home with the mare, in fact, she would be better not to be harnessed at all, as she may commence to foal in the harness, but instead of keeping her in her box stall, if a good grass

lot is handy and the weather warm, she can be turned out during the day or at least part of it and she can exercise herself. I have found that in all pregnant animals regular quiet exercise is good. The offspring will be hardier than those from animals kept up and pampered. I am a firm believer of foals coming in the spring with the advent of grass and warm weather. Lots of people believe in having fall colts, but grass and milk are the natural foods of the young grazing animal and I think they ought to have it. I am strongly opposed to working a mare after she has foaled for at least six weeks and double that time would be better if it could be arranged. I have heard people talk about how in European countries mares are worked regularly after foaling, this is not so in my part of the country. Mares are seldom worked after foaling unless in great stress, and the foal is not allowed to follow the mare. She is brought in to the foal in the middle of the forenoon, at noon and in the middle of the afternoon. Anybody will readily see that farmers do not want to loose so much time, and the mare and foal are turned out to grass and allowed to stay there. To put a mare in a team some days after foaling and make her do regular farm work is putting a double load on her. Put the mare and foal out to grass and good grass at that, and let them stay there for at least three months; by that time the foal will have got a good start and it won't hurt it very much though the mare is worked quietly. The foal should not be allowed to follow the mare. When the mare is brought in at noon and night the foal should not be allowed to

suck till some of the heated or warm milk has been milked from the mare. The heated milk is injurious to the foal and often starts scouring. When the mare is eating her grain the foal will begin to nose around in the feed box with her and will soon learn to eat. After it has commenced to nibble, a little oats and bran can be put in the box after the mare has been taken out and the foal will amuse itself during the day nibbling at that and any hay which may be in the manger. A bucket of fresh water should also be put where it can drink if it wants to. It is a good time now to begin to learn it to lead and be tied up in the stall. A nice soft halter should be used at first, but strong enough so as the foal cannot break it. Halter pullers are often made by the first halter breaking when the colt begins to pull back which it will invariably do when first tied up. A good way to tie up a young horse first is to tie a rope around the neck, run the end of the rope through the ring of the halter below the jaw and then tie to the manger. If the rope is strong enough it soon cures a foal of halter pulling. A pasture is handy after the mare has commenced working. The mare and foal should be turned on to it all night. It will benefit the foal perhaps more than the mare as grass to a hard working mare keeps her down in condition, but it keeps up the flow of milk and that is what the foal requires. The foal can be weaned at from five to six months old, but if the mare is not in foal again and not working too hard, it won't hurt the foal any to keep on sucking for two months. One last month before weaning the foal can be kept away from the mare all day, getting a regular feed of grain at noon like the other horses. A good way to wean a foal is to tie it up in the box stall along with its mother,

put a rope or pole lengthwise between the two so as the mare cannot back around to let the foal suck. This will prevent the noise of the foal calling for the mare and vice versa. After some days of this the mare will have forgot about the foal sucking and she can be put in her regular stall in the stable and the foal can be left in the loose box. Now is the time to make the horse. Feed the colt generously with oats and bran three times a day with nice mixed hay for roughage, and see that it gets plenty of water. In good weather let it go out into a pasture or grass lot and put in the stable all night. I never knew of a foal hurting itself with too much grain, but it must have plenty of exercise. It should, however, only be fed what it will eat up clean. Do not let it stand out in the wet. I am not a believer of foals being pampered up in warm stables, dry cold will not hurt a foal if it can exercise itself, but cold will hurt it if it is allowed to stay in it all the time without shelter. From weaning till the following spring is the critical time of the foal. If it can be kept growing and doing well till grass comes then the horse is made. As a yearling let it have plenty of grass. The following winter a shelter shed in a good blue grass pasture with a ration of corn twice a day and hay or corn fodder, if straw is on the ground, with plenty of water will make it come along. There is no better balanced ration than blue grass and corn in winter for a young growing horse. This can be kept up till the horse is ready to break, which is generally at three years of age, though another six months would not hurt it. The muscles get better developed with age. It should only be used half a day at a time and should be hitched up along with a steady horse.

CORN SHOW IMPRESSIONS

Geo. R. Hyslop '07

Among the indications of an awakening interest which farmers are taking in a better knowledge of agriculture, is the corn show. Within recent years the number of corn growers' contests has increased very largely and we have local shows, county exhibits, shows including a whole state, and some corn shows that are national in their scope. They may consist exclusively of an exhibit of corn, or may be a drawing card for a farmers' gathering, or may be held in connection with a fair or some other meeting.

Their popularity in corn growing countries is increasing, both with farmers and grain dealers. The farmers are interested in knowing the best type of corn for feeding, or marketing, and especially for seed. The grain dealer is a warm supporter of corn shows, because, under ordinary conditions, it is the well matured, uniform sample of corn that takes the prize and he is very anxious that the farmer should grow just this kind of corn.

The exhibits which should consist of ten ears each, to facilitate the judging work, are usually divided into classes for yellow and white corn, which are open to all contestants. Sometimes a mixed class is added, to include the calico and red corn. Other classes which immediately commend themselves are those open only to persons under twenty-one years of age. This class is of especial value, in that it causes the young man to begin early in a careful study of the characteristics of a good seed ear. The long, heavy and freak ear classes are also popular in some places, but, of course cannot possess the educational value to be found in the regular classes, because, as a rule, ears in these classes

are of such a nature that no one cares to reproduce them.

Ease in judging demands that the ten-ear samples of each class be laid on flat top tables, where the butts and tips may be readily inspected. Samples on shelves are very hard to judge.

The premiums awarded at corn shows vary from honorable mention to very substantial money prizes. Often local business men offer special prizes and frequently the prize money at even local shows aggregates several hundred dollars. These prizes stimulate interest in the show and soon bring about a careful study on the part of the growers, of the factors which make up good samples of corn, and to be a corn show winner usually demands a careful selection, according to the guide which the score card offers. The corn show serves a splendid purpose in the score card study which it stimulates. At newly organized shows, one so often meets with a lot of sample which are selected merely because of size or shape, and in which so many really vital points in selection seems to be entirely disregarded. However, after the corn shows' influence has been felt for a few years, one finds samples, at these well established shows, which immediately indicate that their owner knows the score card and what it is for. And when a man can pick out ten ears suitable for an exhibit, it usually means that he can and probably is, exercising the same care in the selection of his seed corn.

Then, too, the meeting and discussion which these shows bring about, between corn men, is almost sure to result in an interchange of ideas and improvement in some one's corn growing methods. A striking feature of these meetings is the

interest which so many farmers take in them. They are always looking over the samples and discussing their merits and defects and deciding why one sample is superior to another.

Some corn samples show great carelessness on the grower's part, both in his selection for the show and in the original selection of the seed. Some few exhibitors in an eagerness to win will occasionally resort to dishonesty to deceive the judge, but for the most part the corn show is an honest competition between men who are earnestly trying to learn more about better, and still better corn.

THE HORSE SHOW AT THE 1907 INTERNATIONAL.

(Continued from Page 11)

took the blue with one of their gray mares that they have recently imported to cross with their gray shire stallion, to evolve a new breed of American draft horses. In a strong open class, our filley got fourth place and in the American bred class she was given third, which was doing pretty good considering the class of animals that she was up against.

Perce, Crouch's last year's winner, topped the aged Belgium stallions and later was made champion. He is a powerful big gray horse, weighing over 2200

pounds, who easily outclassed his competitors.

The Hackney show this year was better than it has ever been, due probably to the presence of the Pabst string which came to Chicago direct from their winning campaign in New York. Meadow Majesty won the aged stallion class and champion here as he did at New York. Dilham Prime Minister "walked away" with the blue for stallions under 15½ hands and he deserved it. He is a great little horse with style and action to suit the most exacting. When he moves it takes two men in relays to handle him and then he keeps both pretty busy. Pabst's mares got all the blue ribbons, and champions with Rosador, though Chas. Bunn and Graham Bros. had some good entries.

In conclusion let it be said that the horse show at the International was a very good thing to have seen, and none of us who were there came home without a feeling of being benefitted. The object of the exposition is to improve the live stock of the country, and I think the directors may well feel satisfied because there is nothing that is doing as much to foster the production of better horses and stock of all kinds than these international live stock expositions at Chicago.



THE AGRICULTURAL STUDENT

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JANUARY

Dedication of the New Agricultural Buildings.

The dedication of the new agricultural buildings at Ohio State University is being arranged for in connection with the State Live Stock meeting held in Columbus February 12 and 13. At this meeting the most prominent breeders of live stock in the state will be present and will have an opportunity to see these great additions to our college.

Appropriate ceremonies and exercises will mark this dedication and prominent speakers will take part in the program.

These new building are completed and ready for occupancy now, and the professors of the Animal Husbandry Department are preparing to move to their new offices in the buildings as soon as possible. They are among the most complete of their kind in the country, and perhaps, the judging pavilion surpasses anything in the United States. This should be a great day among loyal students of our College and friends of the College every where. Not since the completion of Townshend Hall in 1898 has our college made such a step forward as has been made in the construction of these new buildings. It means that the Agricultural College of Ohio State University now ranks among the leaders in equipment and facilities for teaching agriculture, and, indeed, is second. At these dedication ceremonies we can certainly expect the presence of

every student and a great many of the alumni. We can also hope for a display of enthusiasm such as will indicate the appreciation felt for the efforts of those who have labored so long in securing these buildings. Let us all unite in making this occasion one of the greatest that has ever taken place at Ohio State University.

Tenth Anniversary of the Dedication of Townshend.

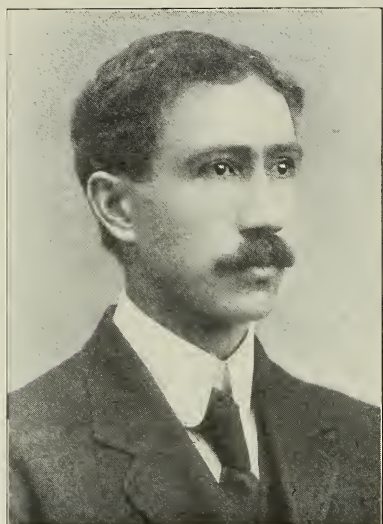
January 12 marks the tenth anniversary of the dedication of Townshend Hall. We who never knew the College before Townshend was built can scarcely appreciate how much its completion meant to the Agricultural College. Indeed, Townshend seems to us in a certain sense to be the College. We have become so accustomed to thinking of it in this way, that the College and the building which it occupies seem one and inseparable. Yet not so very long ago—only ten years—Townshend Hall became the home of the College. What student now can help but have a grateful feeling that it was built before he started his college work. Take first a moment to think of the College without Townshend Hall, and then think again that just ten years ago we were practically just beginning to grow. Then look around and see what growth we have made and certainly our pride in the College as it now stands will be increased.

Around the University.

The registration for the winter course goes steadily on, and indications, as THE STUDENT goes to press point to a registration of over two hundred. Here's hoping that it will exceed even this.

Henry P. Miller, of Sunbury, Ohio, a prominent institute speaker, will be an

assistant in the winter course. He will instruct in animal husbandry. Mr. Miller is well known to Ohio farmers and his lectures are always interesting and full of "ginger."



Professor Shoesmith.

Professor V. M. Shoesmith, of the Maryland Agricultural Experiment Station, has been appointed professor of agronomy in the College of Agriculture of the Ohio State University. Professor Shoesmith was born and raised on a farm near Leslie, Mich., and graduated from the Michigan Agricultural College with the class of 1901. Shortly after graduation he was appointed assistant in agronomy at the Kansas Agricultural College and Station, where he remained for five years and a half, being promoted first to assistant agronomist for the station and finally to an assistant professorship in the college.

In 1905, while at the Kansas Agricultural College, Professor Shoesmith trained the corn judging team which won first honors at the judging contest held in connection with the International Live Stock Exposition at Chicago.

In January, 1906, he went to Maryland to take the position of agronomist at the Maryland Experiment Station. His time there has been devoted largely to the organization of the work of the department and to getting co-operation of the state through the organization of a cereal improvement association on broad and liberal lines.

While at the Kansas station Professor Shoesmith published several bulletins, one of the most recent of which is entitled "A Study of Corn."

His efforts in Ohio will be devoted entirely to the development of the crop work in the Department of Agronomy. The College of Agriculture and the farmers of the state are to be congratulated upon securing the services of a man of Professor Shoesmith's experience and ability to push forward the improvement and development of farm crops in Ohio.

J. V. Barker, '08, has accepted a position as assistant in agronomy at Ames, Iowa. Mr. Barker has sufficient work out to insure his graduation in June, and will be back to take his degree. We congratulate him upon his appointment.

Proposed Constitution of the Student Unions.

One great advantage an old college or university has over a newer one comes from the loyalty of the alumni and ex-students. They are always ready to enthusiastically support their Alma Mater and to use their influence in securing endowments or any other benefits which will add greater usefulness to the school. Yale, Harvard, Princeton, Cornell and other old institutions owe a great deal of their prominence to the work of loyal alumni who are always ready to serve her in any way they can.

Ohio State University is a young institution, comparatively speaking, however

the number of alumni and ex-students is large and their influence is beginning to be felt in University affairs. They are loyal, too, as the spirit shown at the meetings of associations all over the country indicates. In the Agricultural College alone we have a large number of alumni and ex-students who are capable of doing the college much good if they can be brought into close touch with college affairs. The proposed constitution for an Agricultural Student Union of all alumni and ex-students explains fully a proposition now on foot to attempt to get these alumni and ex-students into closer touch with the college. The proposed constitution is as follows:

Purpose—The purpose of this Union shall be to supply a bond that shall unite all ex-students and alumni of the College of Agriculture to the Ohio State University, and promote good fellowship, college loyalty and general interest in agricultural education and experimentation.

Membership—Persons who have been enrolled in any of the courses offered by the College of Agriculture of the Ohio State University, at any time, shall be eligible to membership, and shall become members, upon payment of the regular dues.

Officers—The officers of this Union shall be a President, a Vice President and a Secretary-Treasurer, who shall perform the duties usually incumbent upon such officers.

There shall be a Committee on College Affairs, consisting of three members of the Union. The terms of office shall be three years. At the first election one shall be elected for one year, one for two years and one for three years. Succeeding elections shall be for three years. The duties of this committee shall be to make recommendations for the good of the general work of the College of Agriculture of the Ohio State University.

There shall be a Committee on Necrology, consisting of three members, elected annually, whose duty it shall be to report the deaths of members of the Union.

There shall be an official newspaper representative, whose duty it shall be to keep the members informed of the doings of the Union, through the official publication, THE AGRICULTURAL STUDENT.

Meetings—There shall be an annual meeting, to be held at Columbus, during the week of the state agricultural meetings in January, to be arranged for by the officers. Special meetings may be called at any time by the officers of the Union. Fifteen members shall constitute a quorum.

Elections—The officers of this Union shall be elected by ballot at the annual meeting. Nominations shall be made by a regular committee of three, appointed by the President at each annual meeting to report at the next annual meeting. Not less than two nominees shall be named for each office.

Dues—The dues shall be fifty cents annually, and all members shall receive regularly THE AGRICULTURAL STUDENT, which shall be the official publication. Persons eligible to membership who shall pay into the treasury \$2.50 shall become life members, and shall receive the official publication each month for five years.

Amendment—This constitution may be amended by a two-thirds vote of the members present at any regular annual meeting.

ALUMNI.

'05—E. E. Finney is married and managing a large stock farm in Morrow county.

'06—E. H. Lichte was recently married and has accepted a position in an agricultural school in Peru, South America. His salary is \$200 per month and begins from the time of his leaving New York.

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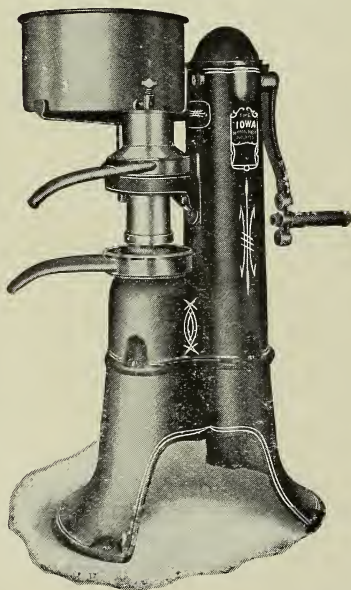
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THE AGRICULTURAL STUDENT.

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NOTE—To comply with Post Office regulations it is necessary to send papers marked "Sample Copy" during the "trial" period.

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Three Years Old and Under Four	1st. 2nd. 4th.
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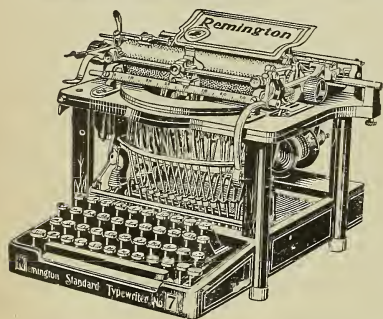
A sample of Chloro-Naphtholeum Dip has been submitted to the Department of Agriculture for examination. We guarantee the contents of each package to be of the same composition as the sample submitted to the Department, and that when diluted according to directions printed on the can for the treatment of sheep scab, it will give a dipping fluid of the composition required of a coal tar creosotic dip by the regulations of the Secretary of Agriculture governing sheep scab.

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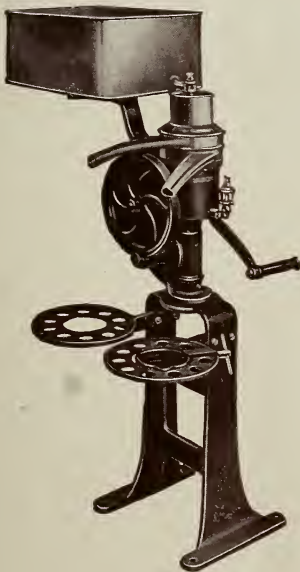
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Smallest Bowls,

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The only Self Balancing Separator on the market.

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DE LAVAL SEPARATOR BUTTER

MAKES CLEAN SWEEP

AT THE GREAT CHICAGO DAIRY SHOW

AND 1907 STATE FAIRS.

In keeping with the triumphant record of fifteen years, butter exhibits made from DE LAVAL SEPARATOR CREAM made a clean sweep of all high scores at the big NATIONAL DAIRY SHOW in Chicago the past week.

First Prize went to A. Lindblad, North Branch, Minn., with a score of 97½.

Second Prize went to A. Schroeder, Adams, Minn., with a score of 97.

Third Prize went to Herman C. Raven, Bloomer, Wis., with a score of 96½.

94½% of all the entries were De Laval made, showing the overwhelming use of De Laval machines by well informed buttermakers everywhere, while the average score of all the De Laval made entries was 92 against an average score of 89 for all the other entries, proving again the unquestionable superiority of De Laval separated cream in good buttermaking.

Then, as usual, DE LAVAL BUTTER HAS MADE A CLEAN SWEEP OF ALL FIRST PRIZES AND HIGHEST HONORS AT THE 1907 STATE FAIRS, reports to date giving chief winners and best scores as follows:

WISCONSIN,	O. R. McCormick, Bancroft.....	Score 98
MINNESOTA,	M. Sondergaard, Hutchinson.....	" 97
IOWA,	L. C. Peterson, Story City.....	" 97½
KANSAS,	Mrs. W. H. Coberly, Hutchinson....	" 97½
ILLINOIS,	W. J. Kane, Morrison.....	" 96½
INDIANA,	T. C. Halpin, Trafalgar.....	" 96
OHIO,	W. J. Bangham, Wilmington.....	" 97
MICHIGAN,	Walter Hall, Parma.....	" 97
SIOUX CITY,	L. P. Holgerson, Troy Center, Wis..	" 97½
SOUTH DAKOTA,	A. H. Wilcox, Bloomer, Wis.....	" 95
KANSAS CITY, MO.,	Ike Oswolt, Topeka, Kans.....	" 97
COLORADO,	Mr. Parfeit, Golden.....	score not reported.

At the 1907 Tennessee State Fair a big buttermaking contest limited to Tennessee women was held in the presence of 5,000 people, and Miss Kate Gleaves, who won the First Prize of \$50, made her butter from De Laval cream.

And so it goes: FROM YEAR TO YEAR DE LAVAL USERS INVARIABLY WIN ALL HIGHEST HONORS IN EVERY IMPORTANT BUTTER COMPETITION. All Highest Awards in every contest of the National Buttermakers' Association since 1892 have been won by users of De Laval machines. The butter receiving the highest score at the World's Exposition in Paris in 1901 was De Laval made; as was also the Grand Prize butter of the St. Louis World's Fair in 1904.

A De Laval catalog, to be had for the asking, will help to make plain why De Laval cream enables superior buttermaking. You merely have to write for it.

THE DE LAVAL SEPARATOR CO.

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